

(C1-1.4a) Name:

Homework Questions 4 – Factorising an Expression

1. Factorize the following into a single bracket

a) $4x - 8$

$$4(x - 2)$$

b) $14x - 7$

$$7(2x - 1)$$

c) $x + 3x^2$

$$x(1 + 3x)$$

d) $14x - 4x^2$

$$2x(7 - 2x)$$

e) $16x^2 + 24xy^3$

$$8x(2x + 3y^3)$$

f) $14x^3y^2 - 7xy^3 + 28xy^5$

$$7xy^2(2x^2 - y + 4y^3)$$

g) $12x^3 + 6x^2$

$$6x^2(2x + 1)$$

h) $25x^3 - 15x^2 + 35x^5$

$$5x^2(5x - 3 + 7x^3)$$

i) $3x^2 - 6x$

$$3x(x - 2)$$

j) $4x^2 - 2x^2y$

$$2x^2(2 - y)$$